



**Shaheed Rajguru College of Applied Sciences for Women
University of Delhi
Faculty Profile**

Name	Dr. Shrish Agnihotri	
Designation	Assistant Professor	
Email	shrish.agnihotri@rajguru.du.ac.in	
Degree	Institution	Year
Ph.D. (Nanobiotechnology)	Department of Chemistry, University of Delhi & CSIR-Institute of Genomics and Integrative Biology (IGIB), Delhi, India	2018
M.Sc. (Organic Chemistry)	Jubilee Hall, Department of Chemistry University of Delhi, Delhi, India	2010–2012
B.Sc. (Hons.) Chemistry	Department of Chemistry, Institute of Science, Banaras Hindu University (BHU), Varanasi, India	2007–2010
Areas of Interest / Specialization		
● Nanobiotechnology & Nanomedicine: Functionalized silica and magnetic nanoparticles (SPIONs), core-shell nanoparticles, FeS nanoparticles. ● Therapeutics & Drug Delivery: Magnetically-guided targeted drug delivery, Photodynamic Therapy (PDT), Photothermal Therapy (PTT), and gene delivery. ● Organic & Materials Chemistry: Multistep organic synthesis, column chromatography, chemical separation/purification, greener methods of bromination. ● Antimicrobial & Anticancer Assays: In vitro cytotoxicity and antibacterial evaluation against resistant/clinical bacterial strains and cancer cell lines.		
Publications Profile		
1. Agnihotri S, Mohan T, Jha D, Gautam HK, Roy I. (2020). <i>Dual modality FeS nanoparticles with reactive oxygen species-induced and photothermal toxicity toward pathogenic bacteria</i>. ACS Omega, 5, 597. (Impact Factor: 5.2) 2. Agnihotri S, Pathak R, Jha D, Roy I, Gautam HK, Sharma AK, Kumar P. (2015). <i>Synthesis and antimicrobial activity of aminoglycoside-conjugated silica nanoparticles against clinical and resistant bacteria</i>. New Journal of Chemistry, 39, 6746. (Impact Factor: 3.288; Featured as Journal Cover Page article, September 2015) 3. Jha D, Thiruveedula PK, Pathak R, Kumar B, Gautam HK, Agnihotri S, Sharma AK, Kumar P. (2017). <i>Multifunctional biosynthesized silver nanoparticles exhibiting excellent antimicrobial potential against multi-drug-resistant microbes along with remarkable anti-cancerous</i>		

properties. **Materials Science and Engineering: C**, 80, 659. (Impact Factor: 8.5)

4. Kumar P, **Agnihotri S**, Roy I. (2018). *Preparation and characterization of superparamagnetic iron oxide nanoparticles for magnetically guided drug delivery*. **International Journal of Nanomedicine**, 13, 43. (Impact Factor: 8.7)
5. **Agnihotri S**, Yadav KK, Roy I, Kumar P. (2017). *Synthesis of nickel phthalocyanine encapsulated ormosil nanoparticles as efficient phototherapeutic agent*. **Advanced Science, Engineering and Medicine**, 10, 26. (Impact Factor: 1.80)
6. Kumar P, **Agnihotri S**, Roy I. (2016). *Synthesis of photoactive SPIONS doped with visible light activated photosensitizer*. **Journal of Nanomedicine and Nanotechnology**, 7(4), 1000392. (Impact Factor: 3.573)
7. Kumar P, **Agnihotri S**, Roy I. (2016). *Synthesis of Dox drug conjugation and citric acid stabilized superparamagnetic iron-oxide nanoparticles for drug delivery*. **Biochemistry and Physiology**, 5(1), 1000194. (Impact Factor: 2.87)
8. Kumar H, Agnihotri S, Roy I, Pani B and Kumar P. (2021) *Microemulsion Mediated Multifunction of Doxorubicin Encapsulated Core–Shell Iron Oxide/Ormosil Nanoparticles as Efficient Magnetically-Guided Delivery, Bioimaging and In-Vitro Studies*. **Advanced Science, Engineering and Medicine**, 12,1-8.

Awards and Distinctions

- **National Advisory Board Member**, 25th World Conference on Applied Science, Engineering and Technology (Margoa, Goa, Dec 2019).
- **Journal Cover Page Feature**, *New Journal of Chemistry* (RSC), September 2015 edition.
- **Jean & Ashit Ganguly Fellowship** for meritorious students, Department of Chemistry, University of Delhi.
- **Gagan Deep Singh Memorial Award** for academic excellence and outstanding extra-curricular activities, SGTB Khalsa College, University of Delhi.
- **CSIR-JRF** in Chemical Sciences (2012) with **AIR 30**.
- **GATE-2012** in Chemistry with **AIR 326** (97.0 Percentile).
- Winner (1st Prize), "**National Science Quiz**", Kurukshetra, Haryana (Vidya Bharti).